

# Toggle Documentation

A sleek and intuitive switch component for toggling between binary states (on/off, enabled/disabled). Features smooth animations, multiple sizes, flexible label positioning, and comprehensive accessibility support for enhanced user experience.

## How to use

### Basic Usage

Simple toggle implementations with labels and basic functionality.

```
<aava-toggle
  size="md"
  title="Enable Notifications"
  position="left"
  [checked]="notificationsEnabled"
  (checkedChange)="onNotificationsChange($event)"
>
</aava-toggle>

---

notificationsEnabled = false;

onNotificationsChange(checked: boolean) {
  this.notificationsEnabled = checked;
  console.log('Notifications:', checked ? 'enabled' : 'disabled');
}
```

### Sizes

Four size variants to accommodate different interface requirements and visual hierarchy.

```
<aava-toggle size="xs" title="Extra Small"></aava-toggle>

<aava-toggle size="sm" title="Small"></aava-toggle>

<aava-toggle size="md" title="Medium"></aava-toggle>

<aava-toggle size="lg" title="Large"></aava-toggle>
```

### Available Sizes

- xs (Extra Small) - Extra compact size for very dense interfaces
- sm (Small) : Compact for dense interfaces and secondary controls
- md (Medium) : Standard size for most use cases (default)
- lg (Large) : Prominent for primary settings and better accessibility

### Positions

Flexible label positioning for optimal layout integration.

```

<aava-toggle size="md" title="Left Position" position="left" [checked]="true">
</aava-toggle>

<aava-toggle
  size="md"
  title="Right Position"
  position="right"
  [checked]="false"
>
</aava-toggle>

```

## Position Options

- Left : Label appears to the left of the switch (default)
- Right : Label appears to the right of the switch

## States

Different toggle states including checked, unchecked, and disabled variations.

```

<aava-toggle size="md" title="Enabled Unchecked" [checked]="false">
</aava-toggle>

<aava-toggle size="md" title="Enabled Checked" [checked]="true"> </aava-toggle>

<aava-toggle
  size="md"
  title="Disabled Unchecked"
  [disabled]="true"
  [checked]="false"
>
</aava-toggle>

<aava-toggle
  size="md"
  title="Disabled Checked"
  [disabled]="true"
  [checked]="true"
>
</aava-toggle>

```

## State Management

- Checked : Active/enabled state with visual feedback
- Unchecked : Inactive/disabled state
- Disabled : Non-interactive state with reduced opacity
- Focus : Keyboard navigation with clear focus indicators

## Animation

```

<!-- With Animation -->
<aava-toggle size="md" title="Animated Toggle" [animation]="true">
</aava-toggle>

<!-- Without Animation -->
<aava-toggle size="md" title="Non-Animated Toggle" [animation]="false">
</aava-toggle>

```

## Events

Event handling for user interactions and state changes.

```

<aava-toggle
  size="md"
  title="Event Toggle"
  position="left"
  [checked]="eventToggleEnabled"
  (checkedChange)="onEventToggleChange($event)"
>
</aava-toggle>

---

eventToggleEnabled = false;

onEventToggleChange(checked: boolean) {
  this.eventToggleEnabled = checked;
  const timestamp = new Date().toLocaleTimeString();
  this.eventLogs.unshift(
    `[${timestamp}] Event toggle changed to: ${checked ? 'enabled' : 'disabled'}`
  );
};

// Keep only last 10 entries
if (this.eventLogs.length > 10) {
  this.eventLogs = this.eventLogs.slice(0, 10);
}

console.log('Event toggle:', checked ? 'enabled' : 'disabled');
}

```

## Event Features

- State Change : Emits boolean value on toggle
- Keyboard Support : Space and Enter key activation
- Click Handling : Mouse and touch interaction support
- Disabled Prevention : No events when disabled

## Thumb Icon

Add icons to the toggle thumb to visually indicate checked and unchecked states. This is useful for enhancing clarity, especially in settings or preference toggles.

```

<aava-toggle
  size="lg"
  title="Power Toggle"
  position="left"
  [showIcons]="true"
  uncheckedIcon="power"
  checkedIcon="check"
  [checked]="iconToggle2Enabled"
  [animation]="true"
  (checkedChange)="onIconToggle2($event)"
>
</aava-toggle>

```

---

```

iconToggle2Enabled = true;

onIconToggle2(checked: boolean) {
  this.iconToggle2Enabled = checked;
}

```

## Features

- Show different icons for checked and unchecked states
- Fully customizable icon names (uses Lucide icon set)
- Works with all sizes and positions
- Accessible and keyboard-friendly

## Accessibility

Built-in accessibility features ensuring inclusive user experience.

```

<aava-toggle
  size="md"
  title="Keyboard Accessible Toggle"
  position="left"
  [checked]="keyboardToggleEnabled"
  (checkedChange)="onKeyboardToggleChange($event)"
>
</aava-toggle>

```

---

```

keyboardToggleEnabled = false;

onKeyboardToggleChange(checked: boolean) {
  this.keyboardToggleEnabled = checked;
  console.log('Keyboard toggle:', checked ? 'enabled' : 'disabled');
}

```

## Accessibility Features

- Keyboard Navigation : Tab navigation and Space/Enter activation
- ARIA Support : Proper switch role and state announcements

- Screen Reader : Descriptive labels and state information
- Focus Management : Clear visual focus indicators
- High Contrast : Enhanced borders and outlines for visibility
- Motion Preferences : Respects reduced motion accessibility settings

## API Reference

### Inputs

Property	Type	Default	Description
size	'xs'   'sm'   'md'   'lg'	'md'	Size variant of the toggle switch
title	string	"	Label text displayed next to the toggle
position	'left'   'right'	'left'	Position of the label relative to switch
disabled	boolean	false	Whether the toggle is disabled
checked	boolean	false	Current checked state of the toggle
animation	boolean	true	Whether to enable smooth animations
showIcons	boolean	false	Show icons in the thumb for checked/unchecked
checkedIcon	string	'check'	Icon name for the checked state (Lucide icon)
uncheckedIcon	string	'x'	Icon name for the unchecked state (Lucide icon)

### Outputs

Event	Type	Description
checkedChange	EventEmitter	Emitted when toggle state changes

### Methods

Method	Parameters	Return Type	Description
onToggle()	-	void	Toggle the checked state (if not disabled)
onKeyDown()	event: KeyboardEvent	void	Handle keyboard activation (Space/Enter)

## Properties

Property	Type	Description
titleName	string   null	Generated ID for label association

## CSS Custom Properties

Property	Description
--toggle-icon-checked-color	Color of the icon when toggle is checked
--toggle-icon-unchecked-color	Color of the icon when toggle is unchecked
--text-color-secondary	Secondary text color used in toggle
--toggle-gap	Gap between toggle and label
--toggle-label-text	Color of the label text
--toggle-font-size-xs	Font size for extra small label
--toggle-font-size-sm	Font size for small label
--toggle-font-size-md	Font size for medium label
--toggle-font-size-lg	Font size for large label
--toggle-label-disabled-text	Color of label text when toggle is disabled
--toggle-border-radius	Border radius of toggle elements
--toggle-track-background	Background color of the toggle track
--toggle-track-checked-background-gradient	Background gradient for checked state
--toggle-size-xs-width	Width of extra small toggle switch
--toggle-size-xs-height	Height of extra small toggle switch
--toggle-size-xs-thumb-size	Size of the thumb for extra small toggle
--toggle-size-sm-width	Width of small toggle switch
--toggle-size-sm-height	Height of small toggle switch
--toggle-size-sm-thumb-size	Size of the thumb for small toggle

Property	Description
--toggle-size-md-width	Width of medium toggle switch
--toggle-size-md-height	Height of medium toggle switch
--toggle-size-md-thumb-size	Size of the thumb for medium toggle
--toggle-size-lg-width	Width of large toggle switch
--toggle-size-lg-height	Height of large toggle switch
--toggle-size-lg-thumb-size	Size of the thumb for large toggle
--toggle-glass-shadow	Glass shadow effect for toggle
--toggle-thumb-background	Background color of the toggle thumb

## Best Practices

### Design Guidelines

- Use toggles for immediate binary actions that take effect instantly
- Place labels on the left for left-to-right reading patterns
- Choose appropriate sizes based on interface hierarchy
- Use disabled state for features unavailable to current user
- Consider animation preferences for better accessibility

### Accessibility

- Always provide meaningful titles that describe the toggle purpose
- Use proper ARIA attributes for screen reader compatibility
- Ensure sufficient color contrast for all states
- Test keyboard navigation thoroughly
- Consider reduced motion preferences

### Performance

- Avoid frequent programmatic state changes that trigger animations
- Use OnPush change detection strategy for optimal performance
- Consider disabling animations in performance-critical scenarios